

CLAIMS

What is claimed is:

1. A rider-propelled wheeled vehicle comprising:
 - a frame, said frame having a vertical centerline plane running lengthwise, a first end, a second end, a first side, a second side, an upper surface and a lower surface;
 - a pair of wheel supports being provided, the pair of said wheel supports being attached to and supporting said second end of said frame, a wheel being mounted onto a horizontal axle attached to each individual said wheel support, said wheel supports being spaced at equal distances on opposite sides of said centerline plane of said frame;
 - a safety bumper means being provided, said safety bumper means being attached to said lower surface of said second end of said frame aft of said wheel supports, said safety bumper means being bisected by said centerline plane, said safety bumper means being sized and shaped to prevent excessive backward tipping of the vehicle on said wheels attached to said wheel supports but allow a full range of horizontal movement, said safety bumper means being capable of functioning as a braking device by deliberately tipping the vehicle backwards to bring said safety bumper means into frictional contact with the ground;
 - a vertical steering shaft being provided, said vertical steering shaft having

a first end, a second end and a vertical centerline axis, said vertical steering shaft being rotatably connected through said first end of said frame, said rotatable connection permits a 360 degree swivel of said vertical steering shaft, said vertical steering shaft being vertically disposed, said centerline axis of said vertical steering shaft lies within said centerline plane of said frame;

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a tricycle propulsion means being provided, said tricycle propulsion means having a propulsion wheel disposed at each of the two corners and a safety wheel assembly disposed at the third corner of the tricycle wheel arrangement, two said propulsion wheels and said safety wheel assembly being attached to said vertical steering shaft by a horizontal support, a said propulsion wheel being parallel to the other said propulsion wheel, both said propulsion wheels rotate about a horizontally disposed axle, said horizontally disposed axle being connected to said horizontal support, said safety wheel assembly being disposed and sized to prevent excessive tipping of said tricycle propulsion means, said safety wheel assembly being sized shaped and disposed so that it only comes into contact with the ground when said tricycle propulsion means excessively tips over on said propulsion wheels, said tricycle propulsion means and vertical steering shaft combination supports said first end of said frame, said pair of propulsion wheels being spaced at equal distances on opposite sides of vertical steering shaft, said

propulsion wheels rotate in only one direction about its said horizontal axle, both said propulsion wheels rotate only in the same direction about said horizontal axle;

a rider operable steering means being provided, said rider operable steering means being attached to said second end of said vertical steering shaft, a standing or a sitting rider being able to propel and steer said vehicle using only hand applied force to said rider operable steering means, the hand applied force results in rotation of said vertical steering shaft;

said tricycle propulsion means being adapted to occupy a first neutral position in which the vertical plane of each said propulsion wheel being generally parallel to said centerline plane of said frame, said first neutral position permitting forward propulsion of the vehicle in a direction parallel to said centerline plane of said frame;

said rider operable steering means being employed by the rider to rotate said tricycle propulsion means, the rotation of said tricycle propulsion means results in a reversing force being exerted upon one said propulsion wheel leading to said tricycle propulsion means pivoting about the point of contact of this said propulsion wheel with the ground, the pivoting of said tricycle propulsion means induces a forward motivating force being applied to the other said propulsion wheel, said propulsion wheel rotates forward until the rider reverses the rotation of said tricycle propulsion

means about the said vertical steering shaft axis or said vertical plane of said propulsion wheels being perpendicular to said centerline plane of said frame, a reverse direction rotation about the vertical steering shaft reverses the direction of the force applied to each said propulsion wheel but still results in forward propulsion of said vehicle, the back and forth rotation about said vertical centerline axis of said vertical steering shaft propels said vehicle forward, said safety wheel assembly imparts no propulsion force into the vehicle during the back and forth rotation about said vertical centerline axis of said vertical steering shaft that propels said vehicle forward, the back and forth manipulation of said vertical steering shaft results in "walking" propulsion of the vehicle;

said tricycle propulsion means being tailored to occupy a second neutral position 180 degrees the opposite from said first neutral position, in said second neutral position said vertical plane of each said propulsion wheel being generally parallel to said centerline plane of said frame, said second neutral position permits backward propulsion of the vehicle in a direction parallel to said centerline plane of said frame, back and forth rotation of said tricycle propulsion means about said vertical steering shaft of up to plus or minus 90 degrees from said second neutral position imparts a generally backward propulsion of said vehicle through a process

being the reverse of the forward propulsion process.

2. A rider-propelled wheeled vehicle according to claim 1 wherein a wheel, in contact with the ground only when said tricycle propulsion means excessively tips over on both said propulsion wheels, said wheel being rotationally connected to said safety wheel assembly, said safety wheel assembly possesses a means for permitting rotation of said wheel about a vertical axis, said safety wheel assembly possesses a means for permitting rotation of said wheel about a horizontal axle.

3. A rider-propelled wheeled vehicle according to claim 1, further comprising a removable upper vertical steering shaft support means, said removable upper vertical steering shaft support means having a first end and a second end, said first end being able to detachably connected to said upper surface of said first end of said frame, said second end being rotationally attached to said vertical steering shaft.

4. A rider-propelled wheeled vehicle according to claim 1 wherein said tricycle propulsion means being detachably connected to said vertical steering shaft.

5. A rider-propelled wheeled vehicle according to claim 1, wherein said vertical steering shaft possesses a vertical telescoping extension capability that changes the distance between said first end and said second end of said vertical steering shaft, said vertical steering shaft being composed an outside shaft with a first end, a second end, an outer surface, and a hollow interior and a plurality of concentrically ensleeved inside shafts each capable of being ensleeved by its corresponding said outside shaft to make said vertical steering shaft telescopic, a locking means being affixed to said second end of each said outside shaft provides a locking means against each corresponding ensleeved said inside shaft, each said inside shaft being capable of being locked into a user determined telescopic extension length.

6. A rider-propelled wheeled vehicle according to claim 1, wherein said second end of said frame accommodates a standing or a seated rider.

7. A rider-propelled wheeled vehicle according to claim 1, further comprising a removable seat extension, said removable seat extension having a first end and a second end, said first end being shaped to slideably attach to a receiver means located on said upper surface of said second end of said frame, said second end of said removable seat extension being shaped to comfortably accommodate a seated rider.

8. A rider-propelled wheeled vehicle according to claim 1 wherein said rider operable steering means permits the rider to steer or propel the vehicle using the rider's feet, said rider operable steering means being adapted so that a sitting rider being able to propel and steer said vehicle using only foot applied force to said rider operable steering means, the foot applied force results in rotation of said vertical steering shaft.

9. A rider-propelled wheeled vehicle according to claim 1, further comprising a pair of foot stirrups being connected to said rider operable steering means, a said foot stirrup being connected on opposite sides of said rider operable steering means.

10. A rider-propelled wheeled vehicle according to claim 1, further comprising a pair of removable cantilevered foot pedals being connected on opposite sides of said vertical steering shaft, a rider foot force being applied to each said removable cantilevered foot pedal to impart the back and forth rotation about said vertical centerline axis of said vertical steering shaft required to propel said vehicle forward.

11. A rider-propelled wheeled vehicle according to claim 1, further comprising a foot steering means, said vertical steering shaft possessing a separation joint located above said rotatable connection through said first end of said frame, when said separation joint being disconnected, the portion above

~~said separation joint being removed, said foot steering means being attached to the remaining portion of said vertical steering shaft, said foot steering means attaches to the rider's footwear through the use of snowboard type bindings, steering changes being imparted by a standing rider's foot through slight back and forth rotation about said vertical centerline axis of said vertical steering shaft.~~

12. A rider-propelled wheeled vehicle according to claim 11, further comprising an aft foot holder, said aft foot holder being attached to said upper surface of said frame near said second end, said aft foot holder attaches to the rider's footwear through the use of snowboard type bindings, vehicle propulsion being generated by the rider pushing herself along with rubber tipped ski poles.

13. A rider-propelled wheeled vehicle according to claim 12 wherein the pair of said fixed wheel supports being removed from said frame, said tricycle propulsion means being replaced by a steering ski attached to said first end of said vertical steering shaft, said safety bumper means being removed from said frame, transforming said vehicle into a steerable snowboard capable of use on snow, typical ski poles being used for added rider control.

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